

Listing of Claims

1. (Currently amended) Device for extracting liquid samples from containers and/or tubes $[(1)]$ filled with a medium $[(2)]$, in particular from fermenters, via a filter membrane $[(5)]$ by means of a partial vacuum, characterised in that the filter membrane $[(5)]$ arranged within a sample probe $[(3)]$ comprises a material acting as a sterile boundary, whereby a supply line $[(6)]$ which can be used to guide gas and a discharge line which can be used to guide the sample $[(7)]$ are arranged on the sterile boundary side $[(5a)]$ of the filter membrane $[(5)]$.
2. (Original) Device according to claim 1, characterised in that the material acting as a sterile boundary is hydrophilic.
3. (Currently amended) Device according to claim 1 ~~either claim 1 or 2~~, characterised in that the supply line $[(6)]$ which can be used to guide gas contains a hydrophobic gas.
4. (Currently amended) Device according to claim 1 ~~any one of the preceding claims~~, characterised in that the supply line $[(6)]$ which can be used to guide gas and the discharge line $[(7)]$ are designed to be suitable to supply and discharge gas with overpressure to and from the filter membrane $[(5)]$.

5. (Currently amended) Device according to claim 1 ~~any one of the preceding claims~~, characterised in that the supply line $[(6)]$ which is able to guide gas is connected to a first gas-bearing connecting line to connect the supply line $[(6)]$ to a gas supply connection $[(15)]$.
6. (Currently amended) Device according to claim 5, characterised in that a first and second valve $[(11, 13)]$ are arranged in the area of the first and second end of the connecting line.
7. (Currently amended) Device according to claim 5 ~~either claim 5 or 6~~, characterised in that a pressure sensor $[(13)]$ is arranged in the gas-bearing connecting line.
8. (Currently amended) Device according to claim 5 ~~any one of claims 5-7~~, characterised in that a first sterile filter $[(12)]$ is arranged in the gas-bearing connecting line.
9. (Currently amended) Device according to claim 1 ~~any one of the preceding claims~~, characterised in that the supply and discharge lines $[(6, 7)]$ are designed to be suitable to supply and discharge rinsing liquids to and from the filter membrane $[(5)]$.

10. (Currently amended) Device according to claim 9, characterised in that the supply line $[(6)]$ is connected to a second rinsing liquid-bearing connecting line $[(17)]$.
11. (Currently amended) Device according to claim 10, characterised in that the rinsing liquid-bearing connecting line $[(17)]$ is connected to a container $[(18)]$ containing a rinsing liquid $[(19)]$.
12. (Currently amended) Device according to claim 11 ~~any one of claims 9-11~~, characterised in that the container $[(18)]$ is connected to a rinsing liquid supply connection $[(22)]$ is a gas and rinsing liquid connecting line $[(20)]$ with an another sterile filter $[(26)]$ arranged therein.
13. (Currently amended) Device according to claim 11 ~~any one of claims 9-12~~, characterised in that the container $[(18)]$ is connected to another gas supply connection $[(23)]$ via a gas and rinsing liquid connecting line $[(20)]$ with another sterile filter $[(26)]$ arranged therein.
14. (Currently amended) Device according to claim 1 ~~any one of the preceding claims~~, characterised in that the discharge line $[(7)]$ is connected to a device $[(8)]$ acting as a valve.
15. (Currently amended) Method for extracting liquid samples from containers $[(1)]$ and/or tubes filled with a medium $[(2)]$, in particular from fermenters, via a filter

membrane [(5)] by means of a partial vacuum characterized by the following steps:

- the supply of the gas to the filter membrane [(5)] arranged in the same probe and comprising a material acting as a sterile boundary on the sterile boundary side of the filter membrane [(5)] by means of a supply line [(6)] which may be closed against other lines by at least one valve
- the discharge of the gas from the filter membrane [(5)] by means of the discharge line [(7)] and opening of a device [(8)] arranged in the discharge line functioning as a valve until the supply and discharge lines [(6, 7)] are sample-free
- the closure of at least one valve [(11)] to uncouple the supply line [(6)] from the gas supply connection [(15)]
- the extraction of the required volume of the sample from the medium [(2)] by means of the discharge line [(7)] and a partial vacuum present in the discharge line [(7)],
- the transportation of the sample out of the discharge line [(7)] by means of new gas supplied by means of overpressure.

16. (Currently amended) Method according to claim 15, characterised in that to avoid clogging and jamming within the discharge line [(7)] caused by the constituents of the sample, after the step in which the sample is transported out of the

discharge line [(7)], a rinsing liquid [(19)] is supplied via the supply line [(6)] and discharged via the discharge line [(7)].

17. (Currently amended) Method according to claim 16, characterised in that, after the step in which the rinsing liquid [(19)] is supplied and discharged, the steps in which the gas is supplied and discharged are repeated.

18. (Currently amended) Method according to claim 15 ~~any one of claims 15-17~~, characterised in that an integrity test for checking/validating the sampling function comprises the following steps:

- the closure of the discharge line [(7)] by a device [(8)] acting as a valve
- the supply of gas to the supply and discharge lined [(6, 7)] to generate a defined overpressure
- the closure of another valve [(14)] to uncouple the gas supply connection [(15)] from the supply line [(6)] with the involvement of a pressure sensor [(13)]
- the observation of any possible gas and/or liquids entering/or leaving the pipe system, and
- the observation of the pressure stability by means of the pressure sensor [(13)] as an indicator of the integrity of the filter membrane [(5)].